

Partial Tokenizer

Michael Russo

Net ID: mr880

Read Me:

The program utilizes functions to pursue the logic we desire.

Functions include:

1. `int escapeChars(char* tk)` This function traverses a string in search of escape functions one would enter into a program like `/a, /b, /v` etc. and identifies them to the user as an error.
2. `void TKDestroy(TokenizerT * tk)` This function frees up the memory from `TKCreate` and is run at the close of our main.
3. `TokenizerT *TKCreate(char * ts)` This function sets aside the memory and copies in data from the user.
4. `int malCheck(char* tk)` In the `malCheck` function, we check our input for tokens that represent unfinished or poorly formed “would-be” tokens and identifies them to the user.
5. `int malcheckAlt(char *tk)` An alternate `mal check` function used for identifying the special case of a `mal token` in which the values are would-be hexadecimal tokens.
6. `int zeroCheck(char* tk)` This function tests for cases in which a zero is present without the hexadecimal conclusion, octal conclusion or float conclusion.
7. `int floatToken(char *tk)` The float function checks for values that come out as a float
8. `int decimal(char* tk)` The decimal checks for decimal values
9. `int octalCheck(char *tk)` The octal checks for octal values
10. `int hexCheck(char *tk)` The Hex checks for hexadecimal values
11. `char* TKgetNextToken(TokenizerT * tk)` Our `TKgetNextToken` function performs a very function in which our tokens are ordered and outputted in a specific order that allows for no errors.

Conclusion: The program runs with very few to zero errors. While heavy, it performs its tasks well and gets the job done.